Six Sigma MEPRS Management Metrics (S2M3)

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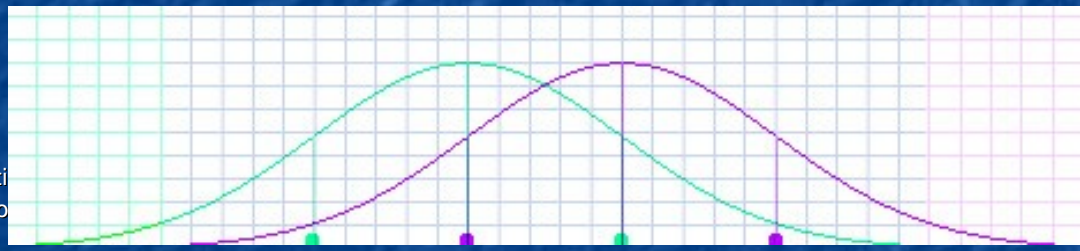
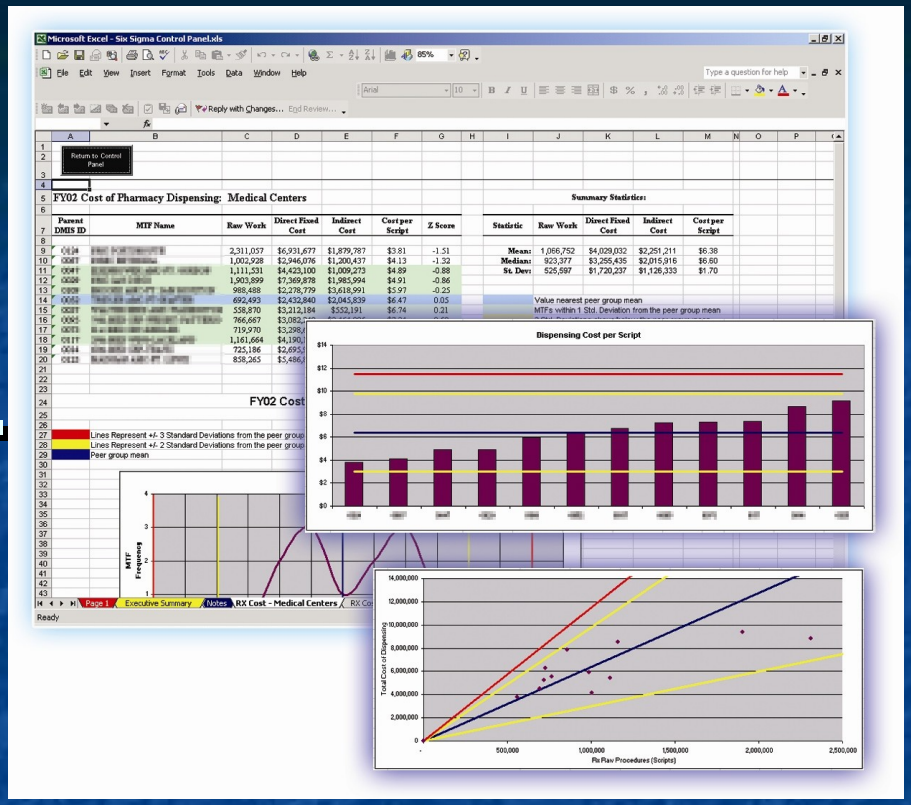
Six Sigma Metrics

- Timely reporting and data quality improvements enable MEPRS-based management metrics and sophisticated applications
- Applying Six Sigma principles in the MHS can lead to conti
- As a benchmarking tool, Six Sigma metrics can be used to improvement



Six Sigma Metrics (Cont.)

- The Six Sigma MEPRS Management Metrics (S2M3) workbook is an interactive tool containing seven key MEPRS-based performance metrics:
  - Pharmacy Dispensing Costs
  - FTEs per occupied bed day
  - Ratio of support personnel to providers
  - Pharmacy workload per pharmacy FTE
  - Laboratory workload per lab FTE
  - Inpatient costs per RWP
  - Ambulatory costs per APG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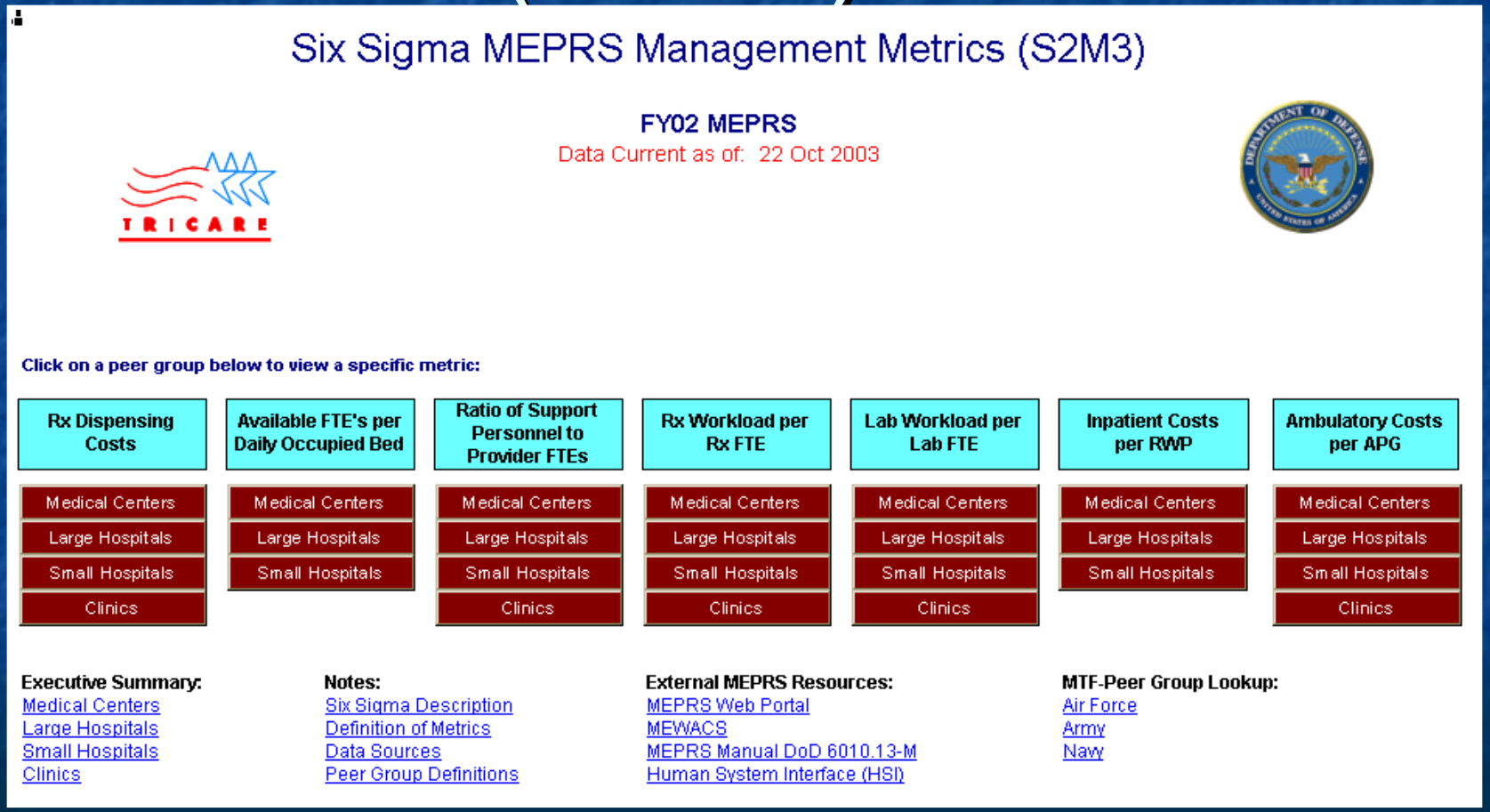
FY02 Cost of Pharmacy Dispensing: Medical Centers
Summary Statistics:
Dispensing Cost per Script
Total Cost of Dispensing
Rx Raw Procedures (Scripts)

- S2M3 is a blend of Direct Care and civilian industry benchmark metrics
- Implemented in early 2004
- Download: www.MEPRS.info

Six Sigma MEPRS Management Metrics (S2M3)



Six Sigma MEPRS Management Metrics (S2M3)

- Statistical distributions by peer group, highlighting 2 and 3 standard deviation outliers

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FY02 COST PER RWP: Medical Centers

TOTAL A EXPENSES ADJUSTED TO BIOMETRICS WORKLOAD

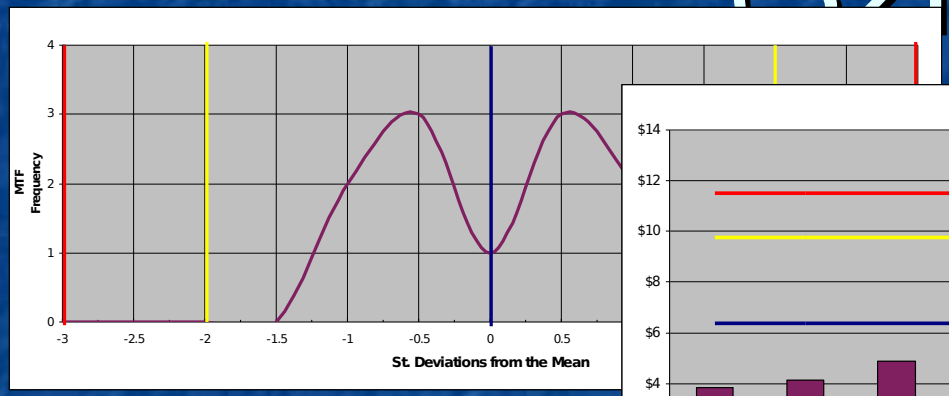
DMISID	MTF NAME	TOT A EXP	TOT RWP	COST/RWP	Z Score
0125	MADIGAN AMC-FT. LEWIS	$69,615,229	12,194	$5,709	-1.43
0047	EISENHOWER AMC-FT. GORDON	$49,605,524	7,976	$6,219	-1.00
0029	NMC SAN DIEGO	$125,623,761	19,327	$6,500	-0.77
0124	NMC PORTSMOUTH	$109,123,958	16,641	$6,557	-0.72
0067	NNMC BETHESDA	$71,573,076	10,513	$6,808	-0.51
0109	BROOKE AMC-FT. SAM HOUSTON	$107,355,998	14,620	$7,343	-0.06
0052	TRIPLER AMC-FT SHAFTER	$98,423,376	13,145	$7,487	0.07
0117	59th MED WING-LACKLAND	$142,572,963	18,927	$7,533	0.10
0073	81st MED GRP-KEESLER	$48,206,249	6,190	$7,788	0.32
0037	WALTER REED AMC-WASHINGTON DC	$141,337,096	16,899	$8,364	0.80
0014	60th MED GRP-TRAVIS	$47,786,184	5,575	$8,571	0.98
0095	74th MED GRP-WRIGHT-PATTERSON	$33,204,469	3,312	$10,026	2.20

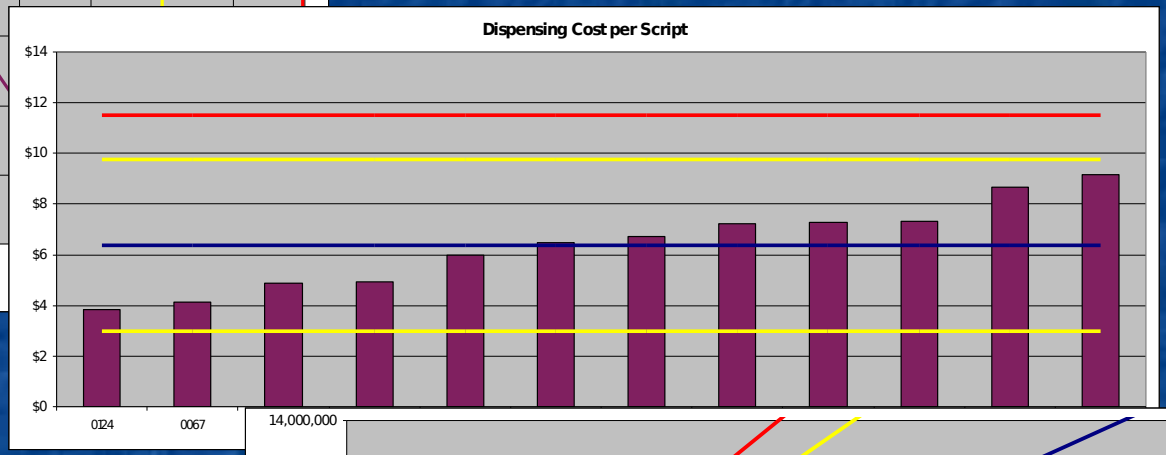
Summary Statistics:

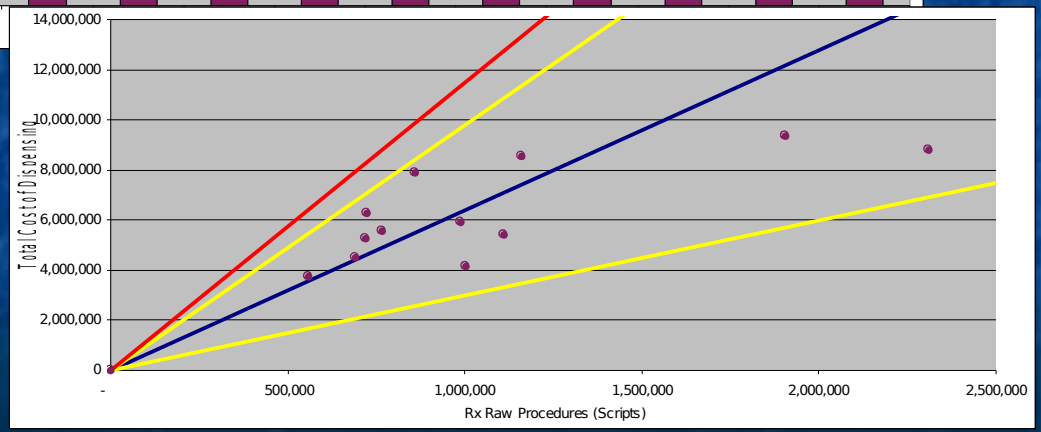
Statistic	Total A Expenses	Total RWPs	Cost per RWP
Mean:	$87,035,657	12,110	$7,409
Median:	$84,998,226	12,670	$7,415
St. Dev:	$38,661,924	5,429	$1,187

Value nearest peer group mean
MTFs within 1 Std. Deviation from the p
2 Std. Deviations above/below the peer
3 Std. Deviations above/below the peer

Six Sigma MEPRS Management Metrics (S2M3)





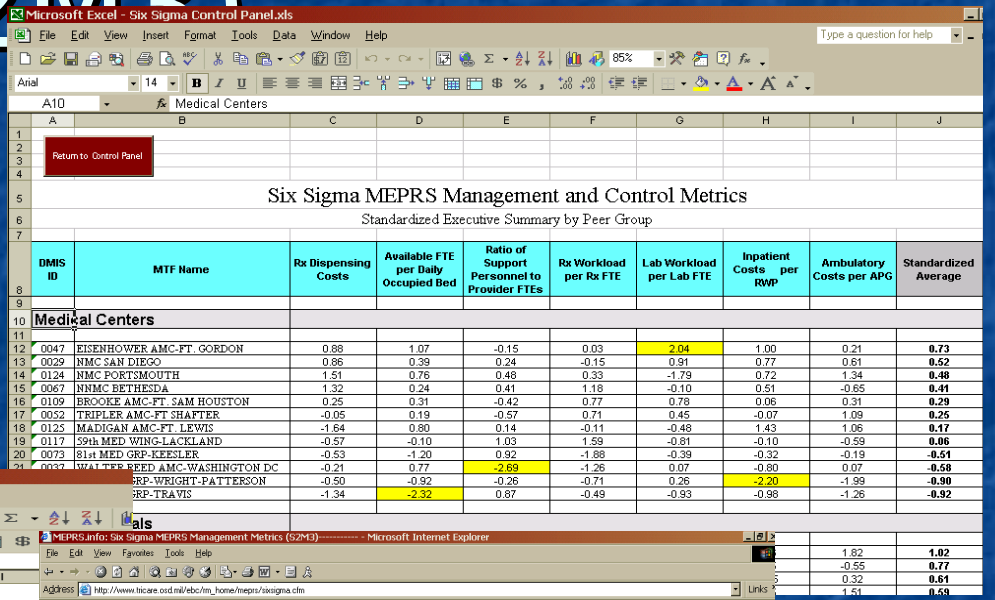


- Uniform graphs provide different representations of all S2M3 metrics by peer group

DEMONSTRATION

Six Sigma MEPRS Management Metrics (S2M3)

- Additional S2M3 resources:
  - Executive Summary by peer group
  - Metrics definitions/algorithms
  - Six Sigma references
  - External MEPRS links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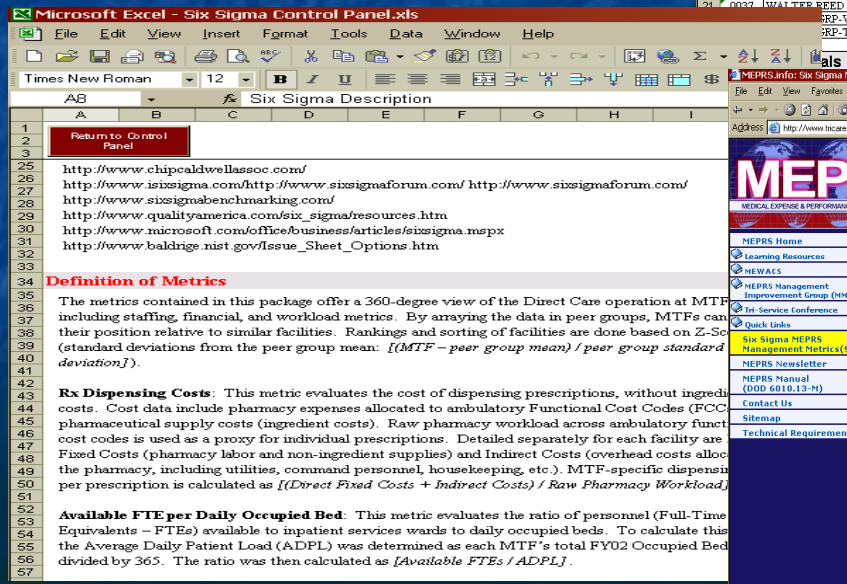
Six Sigma MEPRS Management and Control Metrics

Standardized Executive Summary by Peer Group

DMIS ID	MTF Name	Rx Dispensing Costs	Available FTE per Daily Occupied Bed	Ratio of Support Personnel to Provider FTEs	Rx Workload per Rx FTE	Lab Workload per Lab FTE	Inpatient Costs per RWP	Ambulatory Costs per APG	Standardized Average
Medical Centers									
0047	EISENHOWER AMC-FT. GORDON	0.88	1.07	-0.15	0.03	2.04	1.00	0.21	**0.73**
0029	NMC SAN DIEGO	0.86	0.39	0.24	-0.15	0.91	0.77	0.61	**0.52**
0124	NMC PORTSMOUTH	1.51	0.76	0.48	0.33	-1.79	0.72	1.34	**0.48**
0067	NNMC BETHESDA	1.32	0.24	0.41	1.18	-0.10	0.51	-0.85	**0.41**
0109	BROOKE AMC-FT. SAM HOUSTON	0.25	0.31	-0.42	0.77	0.78	0.06	0.31	**0.29**
0052	TRIPLER AMC-FT SHAFTER	-0.05	0.19	-0.57	0.71	0.45	-0.07	1.09	**0.25**
0125	MADIGAN AMC-FT. LEWIS	-1.64	0.80	0.14	-0.11	-0.48	1.43	1.06	**0.17**
0117	59th MED WING-LACKLAND	-0.57	-0.10	1.03	1.59	-0.81	-0.10	-0.59	**0.06**
0073	81st MED GRP-KEESLER	-0.53	-1.20	0.92	-1.88	-0.39	-0.32	-0.19	**-0.51**
0037	WALTER REED AMC-WASHINGTON DC	-0.21	0.77	-2.69	-1.26	0.07	-0.80	0.07	**-0.58**
	GRP-WRIGHT-PATTERSON	-0.50	-0.92	-0.26	-0.71	0.26	-2.20	-1.99	**-0.90**
	GRP-TRAVIS	-1.34	-2.32	0.87	-0.49	-0.93	-0.98	-1.26	**-0.92**
	als								
								1.82	**1.02**
								-0.55	**0.77**
								0.32	**0.61**
								1.51	**0.59**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Six Sigma Description

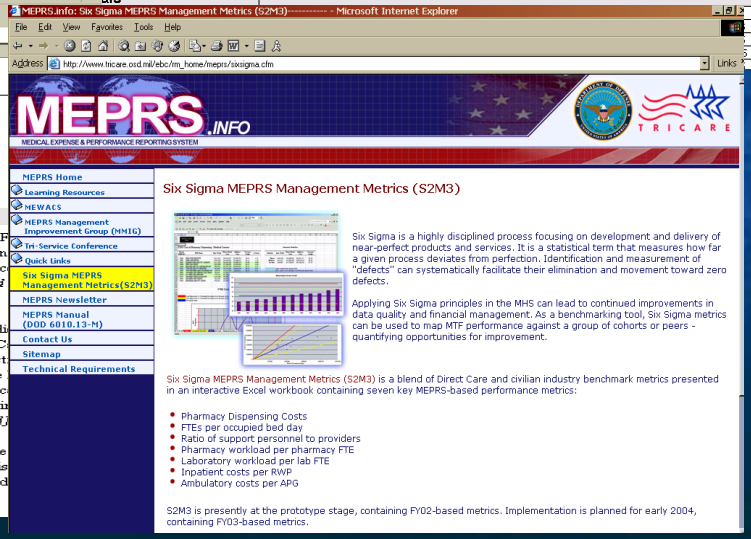
http://www.chipcaldwellassoc.com/
http://www.isixsigma.com/http://www.sixsigmaforum.com/ http://www.sixsigmaforum.com/
http://www.sixsigmabenchmarking.com/
http://www.qualityamerica.com/six_sigma/resources.htm
http://www.microsoft.com/office/business/articles/sixsigma.mspx
http://www.baldrige.nist.gov/Issue_Sheet_Options.htm

Definition of Metrics

The metrics contained in this package offer a 360-degree view of the Direct Care operation at MTF including staffing, financial, and workload metrics. By arraying the data in peer groups, MTFs can their position relative to similar facilities. Rankings and sorting of facilities are done based on Z-Sc (standard deviations from the peer group mean: *[(MTF – peer group mean) / peer group standard deviation]*).

Rx Dispensing Costs: This metric evaluates the cost of dispensing prescriptions, without ingredi costs. Cost data include pharmacy expenses allocated to ambulatory Functional Cost Codes (FCC pharmaceutical supply costs (ingredient costs). Raw pharmacy workload across ambulatory funct cost codes is used as a proxy for individual prescriptions. Detailed separately for each facility are Fixed Costs (pharmacy labor and non-ingredient supplies) and Indirect Costs (overhead costs alloc the pharmacy, including utilities, command personnel, housekeeping, etc.). MTF-specific dispensi per prescription is calculated as *[(Direct Fixed Costs + Indirect Costs) / Raw Pharmacy Workload]*

Available FTE per Daily Occupied Bed: This metric evaluates the ratio of personnel (Full-Time Equivalents – FTEs) available to inpatient services wards to daily occupied beds. To calculate this the Average Daily Patient Load (ADPL) was determined as each MTF's total FY02 Occupied Bed divided by 365. The ratio was then calculated as *[Available FTEs / ADPL]*.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Technical Requirements
Six Sigma MEPRS Management Metrics (S2M3)
Six Sigma is a highly disciplined process focusing on development and delivery of near-perfect products and services. It is a statistical term that measures how far a given process deviates from perfection. Identification and measurement of "defects" can systematically facilitate their elimination and movement toward zero defects.
Applying Six Sigma principles in the MHS can lead to continued improvements in data quality and financial management. As a benchmarking tool, Six Sigma metrics can be used to map MTF performance against a group of cohorts or peers - quantifying opportunities for improvement.
Six Sigma MEPRS Management Metrics (S2M3) is a blend of Direct Care and civilian industry benchmark metrics presented in an interactive Excel workbook containing seven key MEPRS-based performance metrics:
Pharmacy Dispensing Costs
FTEs per occupied bed day
Ratio of support personnel to providers
Pharmacy workload per pharmacy FTE
Laboratory workload per lab FTE
Inpatient costs per RWP
Ambulatory costs per APG
S2M3 is presently at the prototype stage, containing FY02-based metrics. Implementation is planned for early 2004, containing FY03-based metrics.

S2M3 Deployment

- Reception has been very positive:
  - Successful demonstration at DQMC meeting (December 2003)
  - The S2M3 has been incorporated into the WISDOM, MADI and DQ Course curriculums
  - S3M3 prototype was demonstrated at the 2004 TRICARE Conference
- As feedback is received, some metrics may be modified or added; e.g.,
  - RWP / Provider
  - RVU / Provider
  - Radiology Workload / Radiology FTE

Q&A

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